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Yugoslavia

## Approved For Release 2004/07/28 & CIACENES 2-00/15 X ROP 4 80 80002-5

## INFORMATION REPORT

CD NO.

COUNTRY
SUBJECT
PLACE ACQUIRED
DATE OF INFO.

DATE DISTR. 8 MAR 50

NO. OF PAGES 2 Roller Bearing Industry

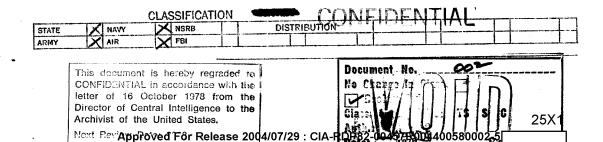
> 25X1 NO. OF ENCLS.

SUPPLEMENT TO REPORT NO. 25X1

THIS DOUBLET CONTAINS INFORMATION APPICTING THE BATIGRAL DEPUNDS OF THE OWITCH STATES WITHIN THE STAINING OF THE SEPICIAL DEPUNDS OF THE OWITCH STATES WITHIN THE STAINING OF THE SEPICIAL OF U.S. C., SI AND S. A. SEREPED. IT PARROMENED OR THE REVELATION OF THE CONTRETE IN ANY MARKED TO AN ULLESTHOOMED FRESCH IS PRO-HISTED BY LAW. BEFROODETING OF THIS FORCE IS PROBIBITED. ·大利克·大克·斯克斯 278克克斯 278克斯 178克斯 178克斯

THIS IS UNEVALUATED INFORMATION

- 25X1 1. Yugoslavia is currently attempting to develop its own roller bearing production through the means of a factory located in Belgrade. As of August 1949, 1,000 roller bearings a month were being manufactured. The production of these bearings is severely limited as Yugoslavia lacks both ball bearing scrap (Kugelschrott) and ball grinding machines (Kugelschleifmaschinen), making up for the lack of the latter by using centerless grinders (Spitzenlose Rundschleifmaschinen). The factory manufactures only single-row, transverse load, and single-row, deep groove journal bearings in all sizes up to 120 mm outside diameter. In many cases they use substitutes, as in the case of the automobile factory at Rakovica. This latter factory builds 20 to 28 one and one-half ton trucks a month, and uses only roller and needle bearings which are manufactured at the factory out of Stubbs steel.
  - 2. Yugoslav industry requires 25,000 roller bearings a month, and, as a result of the extreme shortage, 12,500 bearings have to be imported each month. Eighty percent of these imports come from the Vereinigte Kugellager factory in Italy. Small amounts are received from Switzerland, while part of the requirements are provided by domestic production, substitutes (plain bearings - Gleitlager) and small amounts smuggled in from Germany. Small amounts were also received from the Soviet Union, but their poor quality made them worthless. It is estimated, when the factories now being planned are in operation, that Yugoslav requirements of this commodity will rise to 150,000 bearings per month.
  - 3. Tin is extremely scarce, and this lack is made up, in part, by imports from the United States. Alloy steel, formerly procured from Czechoslovakia, is now shipped by the Boehler firm in Austria. Tungsten, molybdenum, nickel and chrome also have to be imported.
  - The following sizes of roller bearings are now employed in Yugoslav industries (all figures are in millimeters and represent the inside diameter): l, 5, 7, 9, 10, 12, 15, 17, 20, 25, 30, 35, h0, h5, 50, 55, 60, 65, 70, 75, 80, 85, 90, 95, 100, 110, 120. These sizes and weights correspond to the Deutsche Industrie Norm (DIN). They are used in three weights: light (A); medium (B); and heavy (C). The following assemblies are in use:



## CENTRAL INTELLIGENCE AGENCY

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Transverse load ball bearing (Querkugellager)
Single-row deep groove journal bearing (Hochschulterlager)
Pendulum ball bearing (Pendelkugellager)
Roller bearing (Rollenlager)
Taper roller bearing (Kegelrollenlager)
Side bearing (Laengslager)

5. The following table indicates the bearings used in Yugoslav industry. The two sizes given show that all sizes in between are employed according to the DIN list given above. All sizes are inside diameter.

Type of Machinery	Sizes used	Weigh <b>ts</b> used	Number of Assemblies used per month
Electric motors (up to 10 KW	14 mm-140 mm	A, B, and C	2,500
Trucks	25 mm 50 mm	A, B, and C	1,500
Tooling Machines (Turret lathes, etc.)*	45 mm-80 mm	B and C	600
Woodworking machines	20 mm-80 mm	A, B, and C	800
Agricultural machines	20 mm-60 mm	A, some B	800
Stationary Engines (gasoline)	25 mm-40 mm	B	- 100
Pumps	25 mm-80 mm	B	1,600
Construction machinery	30 mm-60 mm	A	600
Conveying Apparatus (endless belts, etc.)	15 mm-40 mm	A	5,000
Textile, leather, and dyeing machinery	20 mm-80 mm	A	500
Air conditioning and ventilating machinery	15 mm⊷60 mm	A	600
Construction of spare parts and accessories	10 mm-25 mm	A and B	600
Paper Industry	25 mm-120 mm	A, B, and C	100
Porcelain Industry	20 mm-100 mm	A and B	100
Railroad Equipment	80 mm-120 mm	C	100
Tobacco Industry	10 mm~60 mm	A	100
Rubber Industry	20 mm-100 mm	A and B	100
Canning Machinery	15 mm-50 mm	<b>A</b> .	200
Fine Mechanics	4 mm-20 mm	A	600
Forging and Rolling mills **	100 mm-350 mm	· <b>C</b>	100
		TOTAL	16,600

#Most production machines use plain bearings in place of roller bearings. \*\*Large Approxycliser Release 2004/97/29: CIA-RDP82-004578004400580002-5arings.